

Preparation of basketball players with the use of electronic aids in the conditions of a higher educational institution

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Аннотации. Рассмотрено применение электронных учебных пособий и аудиовизуальных способов обучения на занятиях студентов секции баскетбол. В исследовании принимали участие студенты II курса Харьковского национального экономического университета им. С. Кузнец в количестве 120 человек. В сентябре 2015-2016 учебного года студентам, которые занимаются в секции баскетбола, были предоставлены электронные пособия и видео уроки по различным темам программы. В конце учебного года был проведен опрос студентов об эффективности применения учебных электронных изданий. Показано, что внедрение электронных изданий в учебный процесс вызвало большой интерес у студентов; 91,6% студентов подчеркнули, что использование электронных ресурсов привело к более качественному усвоению теоретических знаний, представлений о средствах и методах обучения. Высокое наглядное представление и доступность в использовании электронных пособий повысили интерес у студентов к занятиям, что стимулировало улучшение эффективности формирования практических умений и навыков. Выводы. Применение электронных пособий в учебном процессе студентов-баскетболистов активизирует образовательный процесс, позволяет визуализировать учебную информацию, контролировать результаты усвоения учебного материала, что способствует повышению эффективности обучения.

Собко І.М., Кржеминський М., Цеслицька М., Мушкета Р. Підготовка баскетболістів із застосуванням електронних посібників в умовах вищого навчального закладу. Розглянуто застосування електронних навчальних посібників та аудіовізуальних засобів навчання на заняттях студентів секції баскетбол. У дослідженні брали участь студенти II курсу Харківського національного економічного університету ім. С. Кузнеця в кількості 120 чоловік. У вересні 2015-2016 навчального року студентам, які займаються в секції баскетболу, були надані електронні посібники та відео уроки по різним темам програми. В кінці навчального року було проведено опитування студентів про ефективність застосування навчальних електронних видань. Показано, що впровадження електронних видань в навчальний процес викликав великий інтерес у студентів; 91,6% студентів підкреслили, що використання електронних ресурсів призвело до більш якісного засвоєння теоретичних знань, уявлень про засоби і методи навчання. Висока наочне уявлення і доступність у використанні електронних посібників підвищили інтерес у студентів до занять, що стимулювало поліпшення ефективності формування практичних умінь і навичок. Висновки. Застосування електронних посібників у навчальному процесі студентів-баскетболістів активізує освітній процес, дозволяє візуалізувати навчальну інформацію, контролювати результати засвоєння навчального матеріалу, що сприяє підвищенню ефективності навчання.

Sobko I.N., Krzeminski M., Muszkiet R., Cieśllicka M. Preparation of basketball players with the use of electronic benefits in the conditions of a higher educational institution. The application of electronic teaching aids and audiovisual teaching methods for the students of the basketball section is considered. The study involved students of the II course of the Kharkov National Economic University. S. Kuznets in the number of 120 people. In September 2015-2016 academic year, students who are engaged in the basketball section were provided with electronic manuals and video lessons on various topics of the program. At the end of the school year, students were interviewed about the effectiveness of the use of electronic educational publications. It is shown that the introduction of electronic publications in the educational process aroused great interest among students; 91.6% of students stressed that the use of electronic resources led to a better understanding of theoretical knowledge, ideas about the means and methods of teaching. High visual representation and accessibility in the use of electronic manuals increased the students' interest in classes, which stimulated the improvement of the effectiveness of the formation of practical skills. Conclusions. The use of electronic benefits in the educational process of students basketball activates the educational process, allows you to visualize the educational information, monitor the learning outcomes of the training material, which contributes to improving the effectiveness of training.

Ключевые слова: студенты, баскетбол, видео урок, электронные пособия.

студенти, баскетбол, відео урок, електронні посібники.

students, basketball, video lesson, electronic benefits.



Introduction.

In the modern world, science and education are of great importance, since these spheres determine the level of development of the state as a whole. In this regard, the requirements for improving the quality, productivity, effectiveness of training and scientific research are constantly growing. All developed countries are trying to create favorable conditions for the introduction and use of innovations and innovations that provide qualitative changes in scientific and educational activities [6,7,8].

In our country, Ukrainian students make extensive use of computer programs and electronic resources in the educational process, which motivates them to work independently, increases motivation and cognitive activity, improves the differentiation of the learning process, expands and deepens the subject links, organizes and integrates the knowledge of individual subjects, organizes systematic and reliable control [1,5,11].

Scientists in the field of physical education and sports are actively developing and implementing innovative technologies in the training process of athletes and students who are engaged in sports sections of higher education institutions. They use various computer systems and programs to teach the techniques of a chosen sport, develop tactical skills and acquire theoretical knowledge. With the help of special programs, beginners get ideas about the qualitative performance of any exercise; Situations that need to be solved in the most rational way are modeled [5,6,10].

Thus, the choice of our research direction is timely and relevant. The use of high-quality, multimedia teaching aids will make the learning process interesting and effective. Visualization of educational information will help students analyze the technique of performing technical tricks, as well as remember complex tactical combinations.

The purpose of the work: theoretical substantiation and practical application of electronic benefits in the educational process of higher education institutions.

Material and methods.

The study involved students of the II course of the Kharkiv National Economic University. S. Kuznets in the number of 120 people. In September 2015-2016 academic year students who are engaged in the basketball section were provided with electronic manuals and video lessons on various topics of the program. At the end of the school year, students were interviewed about the effectiveness of the use of electronic educational publications.

Results.

To improve the quality of education at our university, we published electronic manuals and video lessons on various topics, in accordance with the curriculum "Physical Education" [9].

The electronic textbook is an educational publication containing a systematized exposition of the academic discipline that corresponds to the discipline program. The main differences between the electronic benefit and the printed publication are:

- interactivity, in the electronic manual it is possible to manipulate objects, intervene in the processes that are performed, interchange of information between the manual and the student;
- multimedia, a combination in one edition of text, graphics, sound, video and animation information;
- adaptability, the possibility of automatic or manual volume selection, the form (methodology) of teaching, the level of complexity, the language of the educational material.

Video lessons - visual implementation of the practical component of the educational material with the theoretical part necessary to understand the actions performed [2,3].

To create a multimedia benefit, Adobe Captivate was used, which creates and edits electronic courses used in e-learning for Microsoft Windows. To create a video lesson, Camtasia Studio was used, which allows you to create video materials and publish them in the most common formats and on any media, provides a simple and intuitive insertion of video clips, overlaying graphics and captions, adding voiceovers and background sounds, as well as setting transitions, interactive inserts and other special effects [2,3].

For students who are engaged in the basketball section, we have developed an electronic tutorial on the technique of the game. The manual includes a detailed description of each technical element of the attack and defense, it is accompanied by a photo and video by the students-basketball players of senior courses. Then there are sets of exercises for teaching and improving technical techniques. At the end of each topic, the student must pass special test assignments, which allow to assess the level of mastering the material.

To train game tactics, we prepared students video lessons that contain theoretical data, dynamic animated illustrations of tactical interactions and

video clips of various combinations [4]. To create the animation, the program "Macromedia Flash MX2004" was used, which is designed to create applications with multimedia content for any purpose. The advantage of video lessons is that the student can see the exact alignment of players depending on the role, form a clear idea of the development and completion of the combination, depending on the prevailing competitive environment. When constructing the video lesson, we filled it not only with the video series, but also placed sound explanations of the theoretical information (Fig. 1).



Fig. 1. Shots of the video tutorial on the tactics of basketball

Video lessons and an electronic manual the teacher demonstrated during classes using a multimedia projector. Depending on the topic, the teacher gave explanations on emerging issues.

After the experiment, a survey was conducted (Figure 2), which showed that the introduction of electronic publications in the educational process aroused great interest among students, and only 8.4% of the respondents indicated that "there is no advantage in using electronic publications." The remaining 91.6% of students stressed that the use of electronic resources led to a better assimilation of theoretical knowledge, ideas about the means and methods of teaching. High visual representation and accessibility in the use of electronic manuals increased the students' interest in studies, which stimulated the improvement of the effectiveness of the formation of practical skills.

Discussion.

In scientific and methodical literature there is a considerable number of works devoted to the

introduction of information and communication technologies in the educational process of students. The authors suggest different approaches and innovations for improving the quality of the educational process [1,6,7,8,11].

Our developed electronic publications, using the didactic methods inherent in them,

allow to organize and activate independent work and educational activity. A significant advantage of such tools is that you do not need to have special skills to use educational resources. The interface of the manuals is intuitive, students have the opportunity not only to master theoretical material, but also to consolidate the acquired knowledge by performing test tasks contained in each topic

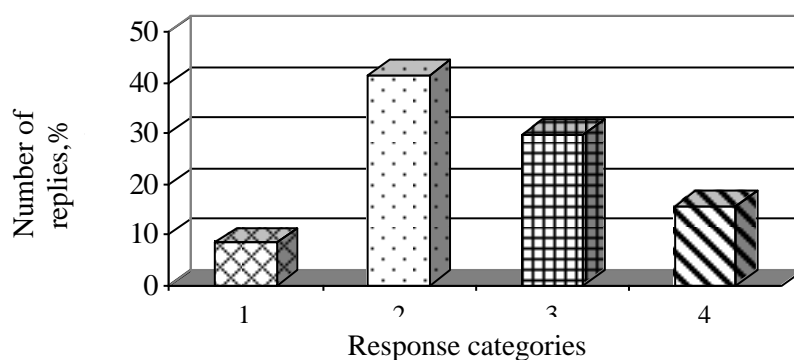


Fig. 2. Students' opinion on the use of electronic publications in the educational process:

- 1 - there are no advantages in using electronic publications;
- 2 - increases interest in the subject and focuses on practical activities;
- 3 - improves memorization of educational material;
- 4 - helps to assimilate much more information.

The presence of pop-up drawings on the text of the work and educational video materials clearly demonstrates the order of the corresponding tasks, is given in full-screen mode and contains an explanatory soundtrack. This allows to include all sensor systems of students in the work and to support their interest in the perception of information, to increase the motivation and individualization of instruction.

Conclusions.

Thus, the use of electronic benefits in the educational process of student basketball players activates the educational process, allows you to visualize the educational information, monitor the learning outcomes of the training material, thereby increasing the effectiveness of training.

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